

LINEA
automation
system for
sliding doors

LINEA 1 - LINEA 2 QUALITY THAT OPENS ALL DOORS

Automation for shop, office, bank and department store doors



- **versatile:**
from small shops to large shopping centres, for doors weighing up to 120 +120 kg.

- **fast:**
can be adjusted to as high as 90+90 cm per second thanks to the innovative motorised top rail.

- **practical:**
thanks to the new AD LINEA control panel.



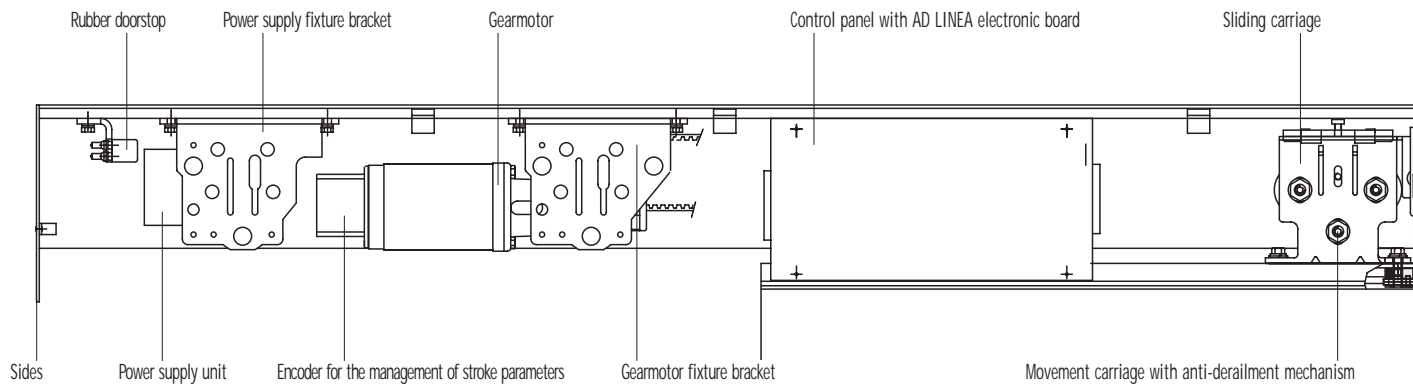
N.1 in Quality & Innovation

LINEA: the new automation system

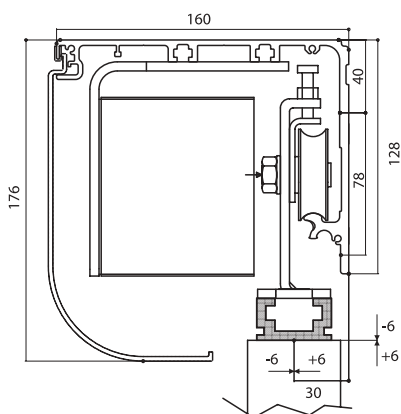
LINEA is the new BFT automation system for automatic sliding doors, available in two versions:
 LINEA 1 - motorised top rail for single-leaf automatic sliding doors weighing a maximum of 150 kg.
 LINEA 2 - motorised top rail for double-leaf automatic sliding doors weighing a maximum of 120+120 kg.



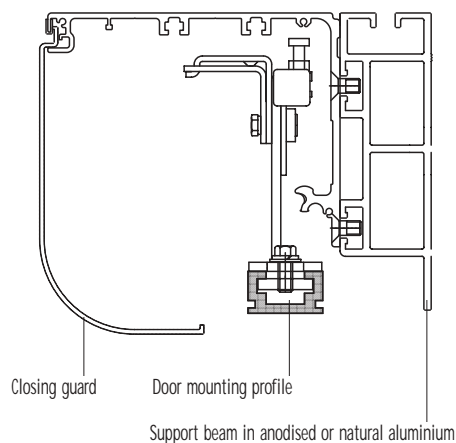
Front view



Top rail cross-section



General assembly components



Mechanical Characteristics

Clear opening size

mod. LINEA 1 - single leaf

min. 750 mm - max 2550 mm

mod. LINEA 2 - double leaf

min. 800 mm - max 2900 mm

Load capacity

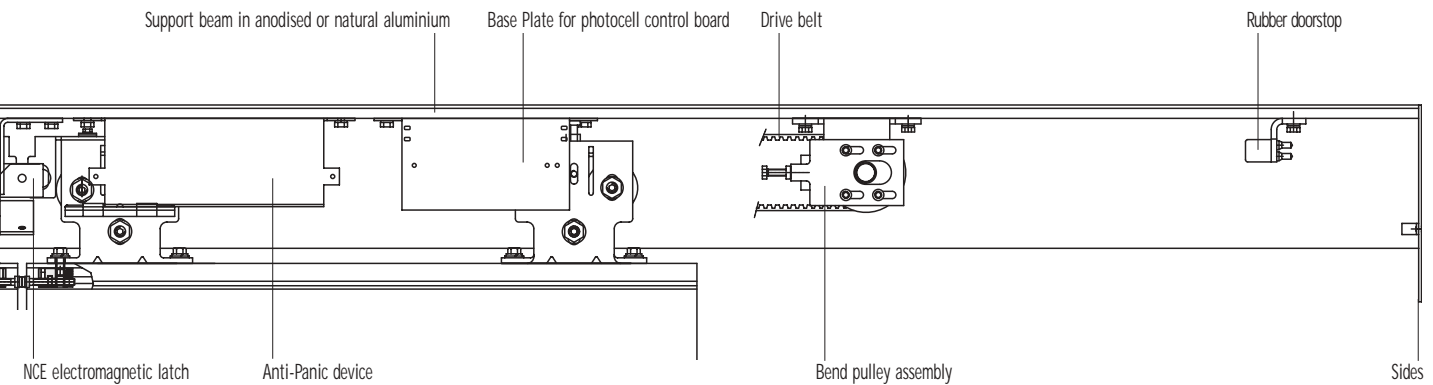
mod. LINEA 1 - single leaf

150 Kg

mod. LINEA 2 - double leaf

120+120 Kg

for sliding doors



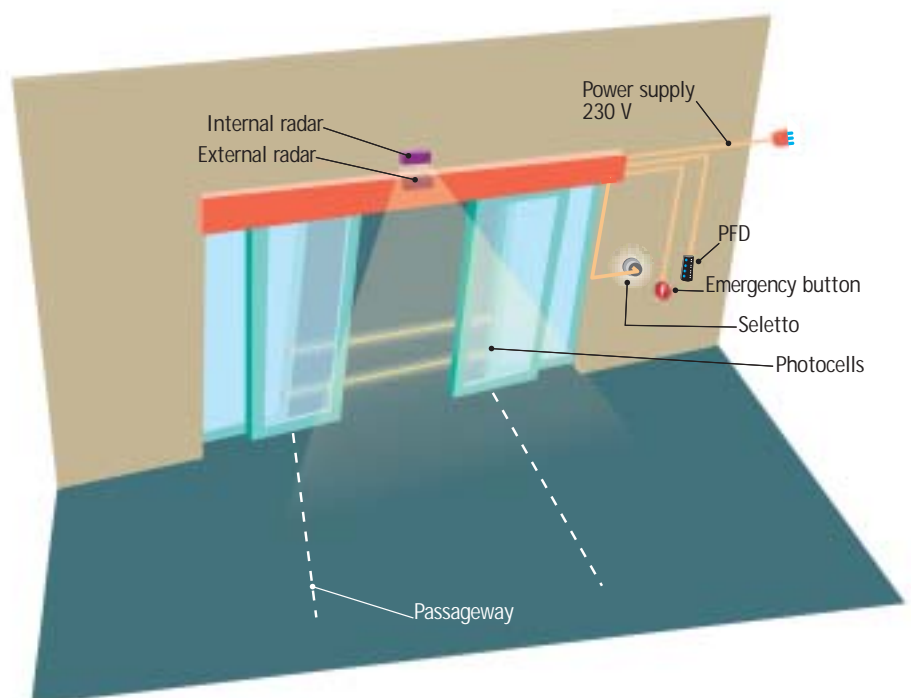
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Electrical characteristics

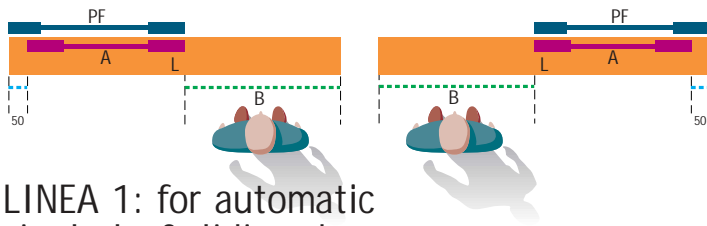
- Power supply:** 230 V- ±10 %, 50/60 Hz single-phase (*)
- Accessories powered by:** 24 Vac-dc 0.4 A max
- Absorbed power:** 1 A
- Opening speed:**
- LINEA 1: adjustable up to 90 cm/s
- LINEA 2: adjustable up to 180 cm/s
- Closing speed:**
- LINEA 1: adjustable up to 35 cm/s
- LINEA 2: adjustable up to 70 cm/s
- Automatic closing time:** from 1 to 60 sec
- Approach speed:**
- LINEA 1: up to 10 cm/s
- LINEA 2: up to 20 cm/s
- Working temperature range:** de 0 à 50 °C (inside guard)
- Duty rating:** continuous at 25 °C
- Slowdown adjustment:** adjustable
- Protection against crushing:** protection against crushing in the presence of obstacles
- Back-up batteries:** (optional) 2x12V 1.2 A/h

(*) Available for all voltage ratings

Example of an automation system



Complete range for single and double-leaf sliding doors



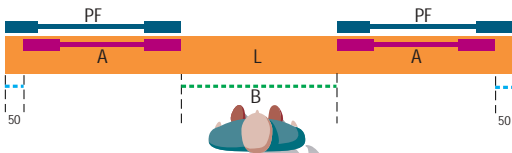
LINEA 1: for automatic single-leaf sliding doors

B	A	L	Model	Prod. Code
750	800	1600	LINEA 107	P960414 00002
850	900	1800	LINEA 108	P960433 00002
950	1000	2000	LINEA 109	P960434 00002
1050	1100	2200	LINEA 110	P960418 00002
1150	1200	2400	LINEA 111	P960435 00002
1250	1300	2600	LINEA 112	P960419 00002
1350	1400	2800	LINEA 113	P960417 00002
1450	1500	3000	LINEA 114	P960436 00002
1550	1600	3200	LINEA 115	P960437 00002
1650	1700	3400	LINEA 116	P960438 00002
1750	1800	3600	LINEA 117	P960439 00002
1950	2000	4000	LINEA 119	P960440 00002
2150	2200	4400	LINEA 121	P960441 00002
2350	2400	4800	LINEA 123	P960442 00002
2550	2600	5200	LINEA 125	P960443 00002



Guard for LINEA 1 (IN ANODISED ALUMINIUM *)

Model	mm	Prod. Code
LINEA 107	1600	P111336 00002
LINEA 108	1800	P111343 00002
LINEA 109	2000	P111344 00002
LINEA 110	2200	P111345 00002
LINEA 111	2400	P111342 00002
LINEA 112	2600	P111341 00002
LINEA 113	2800	P111339 00002
LINEA 114	3000	P111346 00002
LINEA 115	3200	P111347 00002
LINEA 116	3400	P111348 00002
LINEA 117	3600	P111338 00002
LINEA 119	4000	P111337 00002
LINEA 121	4400	P111349 00002
LINEA 123	4800	P111350 00002
LINEA 125	5200	P111351 00002



LINEA 2: for automatic double-leaf sliding doors

B	A	L	Model	Prod. Code
800	2x500	1900	LINEA 208	P960421 00002
900	2x500	2000	LINEA 209	P960422 00002
1000	2x550	2200	LINEA 210	P960423 00002
1100	2x600	2400	LINEA 211	P960420 00002
1200	2x650	2600	LINEA 212	P960424 00002
1300	2x700	2800	LINEA 213	P960425 00002
1400	2x750	3000	LINEA 214	P960412 00002
1500	2x800	3200	LINEA 215	P960426 00002
1600	2x850	3400	LINEA 216	P960427 00002
1700	2x900	3600	LINEA 217	P960416 00002
1900	2x1000	4000	LINEA 219	P960415 00002
2100	2x1100	4400	LINEA 221	P960428 00002
2300	2x1200	4800	LINEA 223	P960429 00002
2500	2x1300	5200	LINEA 225	P960430 00002
2700	2x1400	5600	LINEA 227	P960431 00002
2900	2x1500	6000	LINEA 229	P960432 00002



Guard for LINEA 2 (IN ANODISED ALUMINIUM *)

Model	mm	Prod. Code
LINEA 208	1900	P111343 00002
LINEA 209	2000	P111344 00002
LINEA 210	2200	P111345 00002
LINEA 211	2400	P111342 00002
LINEA 212	2600	P111341 00002
LINEA 213	2800	P111339 00002
LINEA 214	3000	P111346 00002
LINEA 215	3200	P111347 00002
LINEA 216	3400	P111348 00002
LINEA 217	3600	P111338 00002
LINEA 219	4000	P111337 00002
LINEA 221	4400	P111349 00002
LINEA 223	4800	P111350 00002
LINEA 225	5200	P111351 00002
LINEA 227	5600	P111352 00002
LINEA 229	6000	P111353 00002

* If the Natural Aluminium Guard is required, enter the same product code as the Anodised Aluminium Guard

SASAM: Anti panic breakout system



fig 1



fig 2

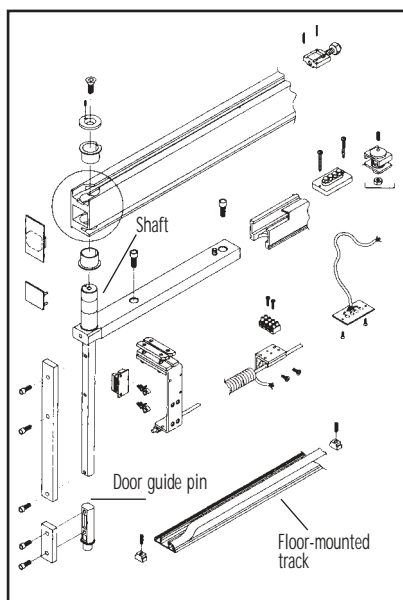


fig 3

SASAM 1 AND 2

ANTI PANIC BREAKOUT SYSTEM

SASAM is a mechanism that lets the doors of automatic sliding doors be swung open even when the door is closed, leaving the opening completely free.

SASAM 1 can be used on single-leaf sliding doors (mod. LINEA 1)
SASAM 2 can be used on double-leaf sliding doors (mod. LINEA 2).

SASAM can only be mounted on automatic sliding doors with framed door panels, maximum length 1100 mm.
When installing this device the fixed door panels must be fitted with magnetic contacts. The external parts of the device are machined in such a manner as to allow its installation on either the right side or left side of the top rail. The breakout system can be applied to most common channel sections available on the market.

Figure 1 shows the anti panic breakout system applied to a single-leaf sliding door (mod. LINEA 1).

When breaking out the doors must open outwards.

Figure 2 shows the anti panic breakout system applied to a double-leaf sliding door (mod. LINEA 2).

When breaking out the doors must open outwards.

Figure 3 is an exploded view of the SASAM anti panic breakout system. Swinging is determined by a shaft with a universal joint at one end. The channel sections contain electrical contacts which let the door work in normal sliding mode when the door is closed and which interrupt this mode in case of breakout.

SASAM 1 and SASAM 2

Model	Prod. Code	Description
SASAM 1	P111163 00001	Anti panic breakout system in natural aluminium for single-leaf sliding door LINEA 1. Max L 1100 mm
SASAM 1	P111163 00002	Anodised aluminium version of SASAM 1
SASAM 2	P111263 00001	Anti panic breakout system in natural aluminium for double-leaf sliding door LINEA 2. Max L 1100 mm
SASAM 2	P111263 00002	ANODISED ALUMINIUM VERSION OF SASAM 2

Control panel and accessories



AD LINEA

CONTROL PANEL (INCLUDED IN THE TOP RAIL)



AD LINEA allows the system to be serial linked, introducing innovative working functions.

The main operational parameters of the AD LINEA control panel are factory set. Any adjustments necessary may then be carried out using the UNIPRO programmer or PFD digital keypad.

- The UNIPRO programmer, which interfaces through an EELink protocol, allows full self-diagnostics to be performed.
 - The PFD keypad can be used to program the following functions: closing time delay, motor torque, opening and closing speed, clearance time, zone number, percentage of partial opening, percentage of chemist's opening, approach time, braking torque.
 - With AD LINEA, several centrally controlled ports can be linked, the linked ports being divided into multiple zones within which one master board and 126 slave boards are defined. The zone number of each card is set via the PFD digital keypad or UNIPRO programmer.
- In the Master configuration, AD LINEA can send the following commands to other AD LINEA slave boards: open-key, open, night stop, day stop, total/partial stop, external radar.
- The control panel allows the two sliding panels of a security door to be linked and manages the radar control within the security door.

6



RIP

NARROW- AND WIDE-RANGE MULTIPURPOSE INFRARED RADAR

Mod. RIP code P111325 -

The radar's sensing range is 2.7 metres. When the LED is red it means the radar is in standby; when the LED is green it means that radar sensing is active. With RIP it is possible to adjust the sensing range by acting on the prism lens or by zone masking.

If access control is necessary at both entry and exit, two RIP radars will be necessary.



PFD

DIGITAL KEYPAD

Mod. PFD code D113626

Allows the programming of new functions on LINEA sliding doors, namely: chemist's opening, security door radar, user code and installer code functions. With PFD one can:

- select the function desired for the door by means of the relative key;
- enable the selection of functions, subject to user code entry;
- modify the operational parameters and the logic DIP switches of the door, subject to PIN (installer code) entry;
- configure personal user and installer codes.



FPA1 - FPA2

PHOTOCELLS

Mod. FPA1 code P111265

Mod. FPA2 code P111266

Pair of photocells that enable active infrared management of one pair (mod. FPA1) or two pairs (mod. FPA2) of sensors. The on-board electronics, sporting synchronized logic, allow a good degree of immunity to electrical & optical interference to be achieved.



SELETTO E

SELETTO - SELETTO E

FLUSH-MOUNTED OR SURFACE-MOUNTED DIGITAL KEYPAD

Mod. SELETTO (flush-mounted) code P121012

Mod. SELETTO E (surface-mounted) code P121013

Flush-mounted or surface-mounted programmable digital keypad for pedestrian access control. Can be used in "serial link" mode.

UNIPRO

UNIVERSAL PALMTOP PROGRAMMER



Mod. UNIPRO code P111080

Innovative programming system compatible with all devices supporting the EElink protocol.

With UNIPRO one can:

- set the following configuration parameters: closing time delay, motor torque, opening and closing speed, clearance time, zone number, percentage of partial opening, percentage of chemist's opening, approach time, braking torque.
- configure the functional logic: TCA (closing time delay) active, pre-alarm, lock type, panic breakout operation in battery mode, close lock, hold lock, jog function, disable electric lock;
- perform detailed self-diagnostics: to verify functionality of the control unit and correct system wiring at all times;
- store all configuration settings on a PC through the EEbase software;
- restore all original configuration settings;
- collect statistical data: number of cycles effected, number of cycles effected since last maintenance, plant description, password.

DAB-1

BATTERY-OPERATED ANTI PANIC BREAKOUT SYSTEM



Mod. DAB-1 code P111267

Even in the event of a power failure, door operation is assured by two back-up batteries, which can be requested in completions of the base configuration of the automation system. The number of emergency operations allowed depends on the weight of the door and on the power consumption of the electronic accessories. Two operational modes can be programmed for blackout situations depending on one's needs. When the battery reaches the established minimum charge level, the control panel disconnects it automatically to prevent it from being damaged.



NCE

MANUALLY RELEASED LATCH

Mod. NCE code N733320

Electromagnetic latch with external handle for manual release



NTS

SUPPORT BEAM IN ANODISED ALUMINIUM

Mod. NTS code P111330 00002 - (per metre)

Accessories



PGI - PPR

PGI - DOOR GUIDE FOR ALUMINIUM FRAME
PPR - GUIDE RUNNER

Mod. PGI code P111158 - (per metre)

Lower guide for aluminium frame door

Mod. PPR code P111156

Lower guide runner for aluminium frame with adjustment plate. The guide runner must be adjusted beforehand and installed in such a manner as to keep the door perfectly vertical.



PPA

ALUMINIUM CLAMP FOR TEMPERED GLASS DOORS WITH NO FRAME

Mod. PPA (for product codes and prices please refer to chart)

The clamp also includes the lower door guide runner.

Both are available in two different thicknesses: 10 mm and 12 mm

The automation system is supplied with the sliding carriages already mounted to the door mounting profile.

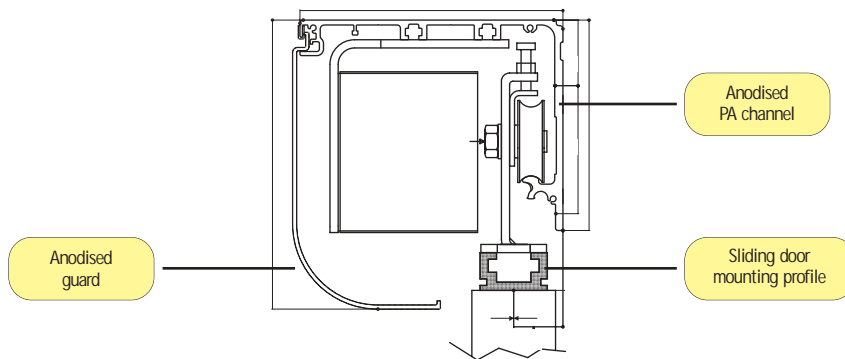
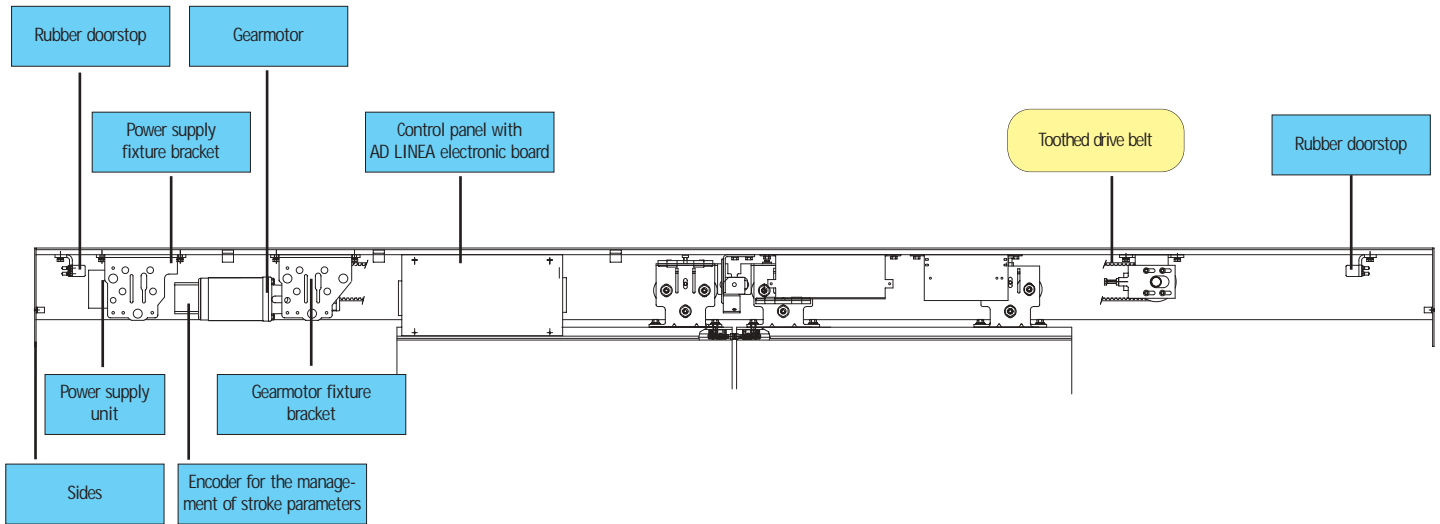
This accessory cannot be used on framed doors.

Model	mm	Prod. Code
Mod. 107	10	P111159 00001
	12	P111159 00063
Mod. 108	10	P111159 00002
	12	P111159 00064
Mod. 109	10	P111159 00003
	12	P111159 00065
Mod. 110	10	P111159 00004
	12	P111159 00066
Mod. 111	10	P111159 00005
	12	P111159 00067
Mod. 112	10	P111159 00006
	12	P111159 00068
Mod. 113	10	P111159 00007
	12	P111159 00069
Mod. 114	10	P111159 00008
	12	P111159 00070
Mod. 115	10	P111159 00009
	12	P111159 00071
Mod. 116	10	P111159 00010
	12	P111159 00072
Mod. 117	10	P111159 00011
	12	P111159 00073

Model	mm	Prod. Code
Mod. 119	10	P111159 00012
	12	P111159 00074
Mod. 121	10	P111159 00013
	12	P111159 00075
Mod. 123	10	P111159 00014
	12	P111159 00076
Mod. 125	10	P111159 00015
	12	P111159 00077
Mod. 208	10	P111159 00016
	12	P111159 00078
Mod. 209	10	P111159 00017
	12	P111159 00079
Mod. 210	10	P111159 00018
	12	P111159 00080
Mod. 211	10	P111159 00019
	12	P111159 00081
Mod. 212	10	P111159 00020
	12	P111159 00082
Mod. 213	10	P111159 00021
	12	P111159 00083

Model	mm	Prod. Code
Mod. 214	10	P111159 00022
	12	P111159 00084
Mod. 215	10	P111159 00023
	12	P111159 00085
Mod. 216	10	P111159 00024
	12	P111159 00086
Mod. 217	10	P111159 00025
	12	P111159 00087
Mod. 219	10	P111159 00026
	12	P111159 00088
Mod. 221	10	P111159 00027
	12	P111159 00089
Mod. 223	10	P111159 00028
	12	P111159 00090
Mod. 225	10	P111159 00029
	12	P111159 00091
Mod. 227	10	P111159 00030
	12	P111159 00092
Mod. 229	10	P111159 00031
	12	P111159 00093

KIT LINEA



Components contained in the LINEA 1 and LINEA 2 kits

Hardware necessary for completing the installation

Prod. Code	Model	Description
P960444 00002	Automatic sliding door kit	Complete kit for the installation of a LINEA 2 230V single-leaf sliding door
P960445 00002	Automatic sliding door kit	Complete kit for the installation of a LINEA 2 230V double-leaf sliding door

To complete installation of the automatic sliding door, the following accessories must be used:

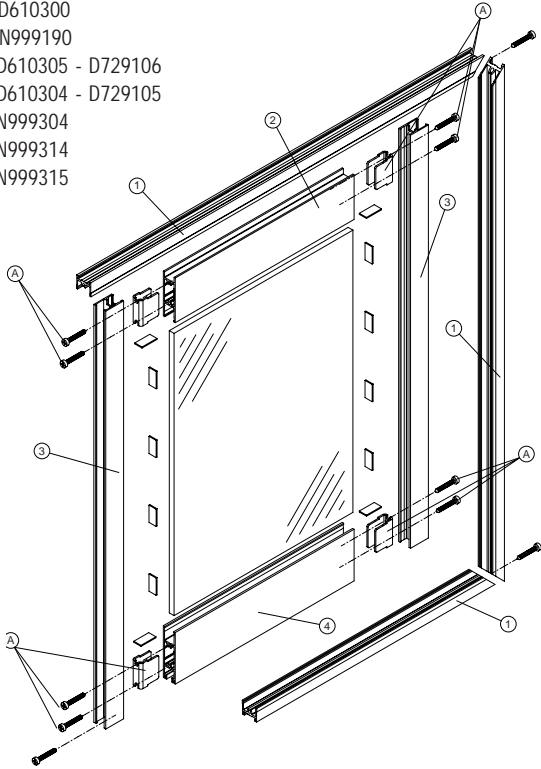
Prod. Code	Model	Description
D191016		Toothed drive belt
D729034		Sliding door mounting profile
D729112	PA	Anodised PA profile
D729113	CARTER	Anodised guard

Door profile and seals for frame

Assembly of fixed door system

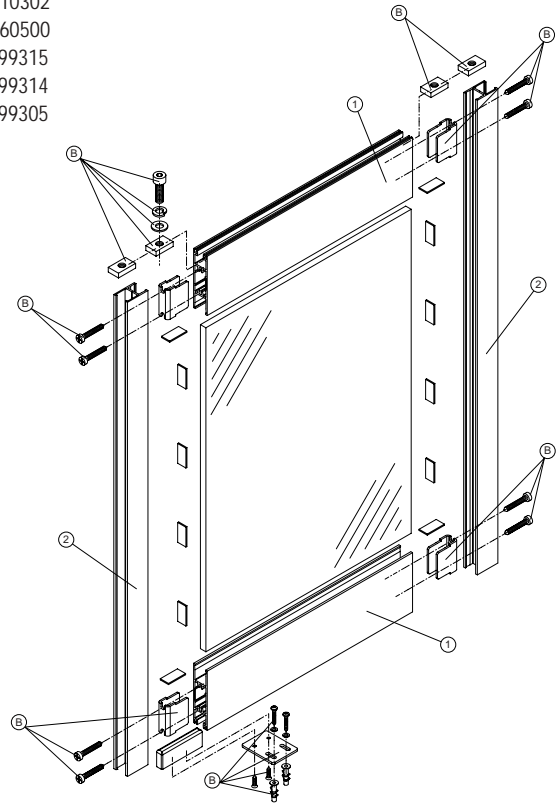
- ① D610303
- ② D610301
- ③ D610302
- ④ D610300
- Ⓐ N999190

- *D610305 - D729106
- *D610304 - D729105
- *N999304
- *N999314
- *N999315



Assembly and installation of sliding door system

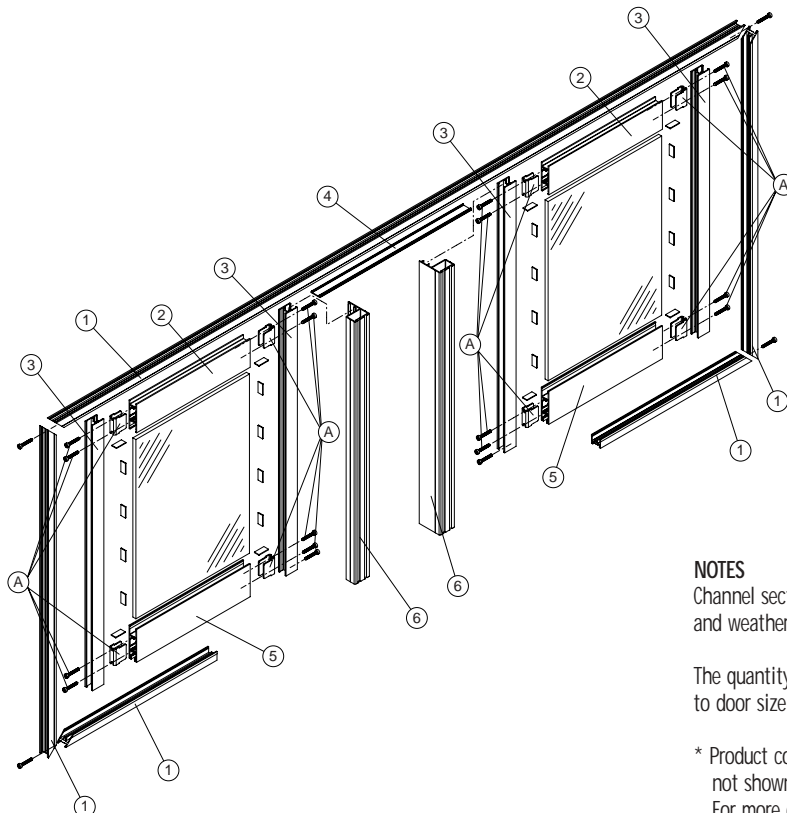
- ① D610300
- ② D610302
- Ⓑ P960500
- *N999315
- *N999314
- *N999305



Assembly of double fixed door system

- ① D610303
- ② D610301
- ③ D610302
- ④ D610306
- ⑤ D610300
- ⑥ D610304
- Ⓐ N999190

- *D610305 - D729106
- *D610304 - D729105
- *N999304
- *N999314
- *N999315



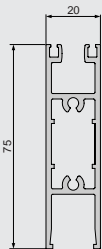
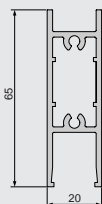
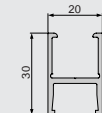
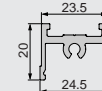
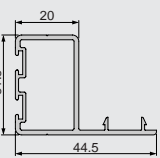
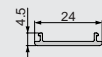
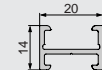
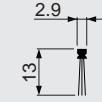
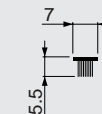
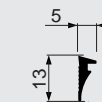
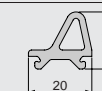
NOTES

Channel sections are supplied in 5m lengths and weatherstripping in 30m rolls.

The quantity of each item thus varies according to door size.

* Product codes marked with an asterisk are not shown in technical drawings. For more details please refer to chart

ed doors (20 mm series)

Prod. Code	Model	Description
D610300 D729101		Natural upper contour for movable leaf/lower contour for movable and fixed leaf Silver-colour anodised upper contour for movable leaf/lower contour for movable and fixed leaf Supplied in 5m lengths
D610301 D729102		Natural upper contour for fixed leaf. Silver-colour upper contour for fixed leaf. Supplied in 5m lengths
D610302 D729103		Natural stile contour. Silver-colour stile contour Supplied in 5m lengths
D610303 D729104		Natural frame contour. Silver-colour frame contour. Supplied in 5m lengths
D610304 D729105		Natural photocell-holder contour. Silver-colour photocell-holder contour. Supplied in 5m lengths
D610306 D729107		Natural closing contour. Silver-colour closing contour. Supplied in 5m lengths
D610305 D729106		Natural seal-holder contour. Silver-colour seal-holder contour. Supplied in 5m lengths
N999190		Hardware Kit to assemble 1 fixed leaf. <i>See drawing (A)</i>
P960500		Hardware Kit to assemble 1 moveable leaf. <i>See drawing (B)</i>
N999305		Movable leaf brush (30 mt pack)
N999304		Side hold brush (30 mt pack)
N999314		Glass seal (30 mt pack)
N999315		Seal (30 mt pack)

- The 20 mm framed channel sections are not compatible with the SASAM system
- The 20 mm framed channel sections are also available in the painted version if requested



BFT S.P.A.
Via Lago di Vico 44
36015 Schio (Vi) / Italy
Tel. +39 445.696533 - Fax +39 445.696522
www.bft.it - e-mail: sales@bft.it

BFT AUTOMATION UK LTD
Unit 8E, Newby Road
Industrial Estate Hazel Grove - Stockport SK7 5DA
Tel. 0044 161 4560456 - Fax 0044 161 4569090
e-mail: info@bft.co.uk

AUTOMATISMES BFT FRANCE
13 Bdl. E. Michelet
69008 Lyon / France
Tel. +33 4 78 76 09 88 - Fax +33 4 78 76 92 23
e-mail: infofrance@bft.it

BFT TORANTRIEBSSYSTEME GmbH
Hintere Straße 100
90768 Fürth / Germany
Tel. +49 911 7660090 - Fax +49 911 7660099
e-mail: service@bft-torantriebe.de

AUTOMATISMOS BFT CENTRO SL
Pol. Ind. Comendador, informática nave 22
19200 AZUQUECA DE HENARES (Guadalajara) / Spain
Tel. +34 949 26 32 00 - Fax +34 949 26 24 51
e-mail: automatismosbftcentro@telefonica.net

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